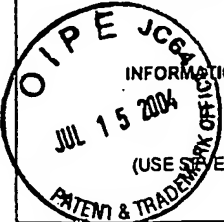
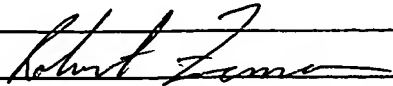


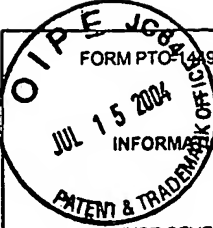
FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE  INFORMATION DISCLOSURE STATEMENT BY APPLICANT (USE SEVERAL SHEETS IF NECESSARY)	ATTY. DOCKET NO. NIH218.001C1	APPLICATION NO. 10/688,115
	APPLICANT Gu, Xin-Xing	
	FILING DATE October 17, 2003	GROUP 1653

U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
RZ	1.	US 5,601,831	02/11/1997	Green et al.	—	—	
RZ	2.	US 5,607,846	03/04/1997	Murphy et al.	—	—	
RZ	3.	US 5,770,213	06/23/1998	Zlotnick	—	—	
RZ	4.	US 5,948,412	09/07/1999	Murphy	—	—	
RZ	5.	US 5,955,580	09/21/1999	Green et al.	—	—	
RZ	6.	US 6,207,157	03/27/2001	Gu et al.	—	—	

FOREIGN PATENT DOCUMENTS								
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
RZ	7.	WO 99/36086	07/22/1999	PCT	—	—		

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)	
RZ	8.	Asanuma, H. et al. "Isolation and characterization of mouse nasal-associated lymphoid tissue." <i>J. Immunol. Methods</i> 202 (1997), pp. 123-131.
RZ	9.	Barenkamp S.J. et al. "Development of serum bactericidal activity following nontypable <i>Haemophilus influenzae</i> acute otitis media." <i>Pediatr. Infect. Dis. J.</i> 9 (1990), pp. 333-339.
RZ	10.	Bergquist, C. et al. "Antibody responses in serum and lung to intranasal immunization with <i>Haemophilus influenzae</i> type b polysaccharide conjugated to cholera toxin B subunit and tetanus toxoid." <i>Apmis</i> 106 (1998), pp. 800-806.
RZ	11.	Berman, S. "Otitis media in children." <i>New Engl. J. Med.</i> 332 (1995), pp. 1560-1565.
RZ	12.	Bernstein, J.M. et al. "Micro-ecology of the nasopharyngeal bacterial flora in otitis-prone and non-otitis-prone children." <i>Acta Otolaryngol.</i> 113 (1993), pp. 88-92.
RZ	13.	Brook, I. et al. "Microbiologic characteristics of persistent otitis media." <i>Arch. Otolaryngol. Head Neck Surg.</i> 124 (1998), pp. 1350-1352.
RZ	14.	Campagnari, A.A. et al. "Antigenic diversity of lipooligosaccharides of nontypable <i>Haemophilus influenzae</i> ." <i>Infect. Immun.</i> 55 (1987), pp. 882-887.
RZ	15.	Commisso, R. et al. "Acute otitis media: bacteriology and bacterial resistance in 205 pediatric patients." <i>Int. J. Pediatr. Otorhinolaryngol.</i> 56 (2000), pp. 23-31.
RZ	16.	Cripps, A.W. et al. "Respiratory immunity stimulated by intestinal immunization with purified nontypeable <i>Haemophilus influenzae</i> antigens." <i>J. Infect. Dis.</i> 165 (1992), pp. S199-S201.
RZ	17.	DeMaria, T.F. et al. "Evaluation of the virulence of nontypeable <i>Haemophilus influenzae</i> lipooligosaccharide htrB and rfaD mutants in the chinchilla model of otitis media." <i>Infect. Immun.</i> 65 (1997), pp. 4431-4435.
RZ	18.	Faden, H. et al. "Relationship between nasopharyngeal colonization and the development of otitis media in children." <i>J. Infect. Dis.</i> 175 (1997), pp. 1440-1445.
RZ	19.	Gu, X.X. et al. "Production and characterization of monoclonal antibodies to type 8 lipooligosaccharide of <i>Neisseria meningitidis</i> ." <i>J. Clin. Microbiol.</i> 30 (1992), pp. 2047-2053.

EXAMINER 	DATE CONSIDERED 5/25/05
*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 608; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.	

 <p>FORM PTO-139 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (USE SEVERAL SHEETS IF NECESSARY)</p>	ATTY. DOCKET NO. NIH218.001C1	APPLICATION NO. 10/688,115
	APPLICANT Gu, Xin-Xing	
	FILING DATE October 17, 2003	GROUP 1653

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)	
RE	20.	Gu, X.X. et al. "Quantitation and biological properties of released and cell-bound lipooligosaccharides from nontypeable <i>Haemophilus influenzae</i> ." <i>Infect. Immun.</i> 63 (1995), pp. 4115-4120.
RE	21.	Gu, X.X. et al. "Synthesis, characterization, and immunologic properties of detoxified lipooligosaccharide from nontypeable <i>Haemophilus influenzae</i> conjugated to proteins." <i>Infect. Immun.</i> 64 (1996), pp. 4047-4053.
RE	22.	Gu, X.X. et al. "Detoxified lipooligosaccharide from nontypeable <i>Haemophilus influenzae</i> conjugated to proteins confers protection against otitis media in chinchillas." <i>Infect. Immun.</i> 65 (1997), pp. 4488-4493.
RE	23.	Gu, X.X. et al. "Development of a vaccine to prevent Otitis media caused by Nontypeable <i>Haemophilus Influenzae</i> " The 4 <sup>th</sup> Extraordinary International Symposium on Recent Advances in Otitis Media, Sendai, Japan, April 16-20, (2001), Abstract 72, p. 116.
RE	24.	Hirano, T. et al. "Intranasal immunization with a lipooligosaccharide-based conjugate vaccine from nontypeable <i>Haemophilus influenzae</i> enhances bacterial clearance in mouse nasopharynx." <i>FEMS Immunol. Med. Microbiol.</i> 35, (2003), pp. 1-10.
RE	25.	Hotomi, M. et al. "Specific mucosal immunity and enhanced nasopharyngeal clearance of nontypeable <i>Haemophilus influenzae</i> after intranasal immunization with outer membrane protein P6 and cholera toxin." <i>Vaccine</i> 16 (1998), pp. 1950-1956.
RE	26.	Jakobsen, H. et al. "Intranasal immunization with pneumococcal polysaccharide conjugate vaccines protects mice against invasive pneumococcal infections." <i>Infect. Immun.</i> 67 (1999), pp. 4128-4133.
RE	27.	Kauppi-Korkeila, M. et al. "Mechanism of antibody-mediated reduction of nasopharyngeal colonization by <i>Haemophilus influenzae</i> type b studied in an infant rat model." <i>J. Infect. Dis.</i> 174 (1996), pp. 1337-1340.
RE	28.	Kodama, S. et al. "Induction of specific immunoglobulin A and Th2 immune responses to P6 outer membrane protein of nontypeable <i>Haemophilus influenzae</i> in middle ear mucosa by intranasal immunization." <i>Infect. Immun.</i> 68 (2000), pp. 2294-2300.
RE	29.	Kurono, Y. et al. "Effects of oral and systemic immunization on nasopharyngeal clearance of nontypeable <i>Haemophilus influenzae</i> in BALB/c mice." <i>Laryngoscope</i> 106 (1996), pp. 614-618.
RE	30.	Kurono, Y. et al. "Nasal immunization induces <i>Haemophilus influenzae</i> -specific Th1 and Th2 responses with mucosal IgA and systemic IgG antibodies for protective immunity." <i>J. Infect. Dis.</i> 180 (1999), pp. 122-132.
RE	31.	Kyd, J.M. et al. "Enhanced respiratory clearance of nontypeable <i>Haemophilus influenzae</i> following mucosal immunization with P6 in a rat model." <i>Infect. Immun.</i> 63 (1995), pp. 2931-2940.
RE	32.	Kyd, J.M. et al. "Potential of a novel protein, OMP26, from nontypeable <i>Haemophilus influenzae</i> to enhance pulmonary clearance in a rat model." <i>Infect. Immun.</i> 66 (1998), pp. 2272-2278.
RE	33.	Mansson, M. et al. "A new structural type for <i>Haemophilus influenzae</i> lipopolysaccharide. Structural analysis of the lipopolysaccharide from nontypeable <i>Haemophilus influenzae</i> strain 486." <i>Eur. J. Biochem.</i> 268 (2001), pp. 2148-2159.
RE	34.	Mansson, M. et al. "Structural analysis of the lipopolysaccharide from nontypeable <i>Haemophilus influenzae</i> strain 1003." <i>Eur. J. Biochem.</i> 269 (2002), pp. 808-818.
RE	35.	McGehee, J.L. et al. "Effect of primary immunization on pulmonary clearance of nontypable <i>Haemophilus influenzae</i> ." <i>Am. J. Respir. Cell. Mol. Biol.</i> 1 (1989), pp. 201-210.
RE	36.	Murphy, T.F. et al. "Outer membrane protein and lipooligosaccharide analysis of paired nasopharyngeal and middle ear isolates in otitis media due to nontypable <i>Haemophilus influenzae</i> : pathogenetic and epidemiological observations." <i>J. Infect. Dis.</i> 156 (1987), pp. 723-731.
RE	37.	Neuberger M.S. et al. "Activation of mouse complement by monoclonal mouse antibodies." <i>Eur. J. Immunol.</i> 11 (1981), pp. 1012-1016.
RE	38.	Ogra, P.L. et al. "Characteristics of secretory immune system in human middle ear: implications in otitis media." <i>J. Immunol.</i> 112 (1974), pp. 488-495.
RE	39.	Patrick, C.C. et al. "Antigenic characterization of the oligosaccharide portion of the lipooligosaccharide of nontypable <i>Haemophilus influenzae</i> ." <i>Infect. Immun.</i> 55 (1987), pp. 2902-2911.

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Robert Zimm

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RZ	40.	Phillips, N.J. et al. "Structural characterization of the cell surface lipooligosaccharides from a nontypable strain of <i>Haemophilus influenzae</i> ." <i>Biochemistry</i> 31 (1992), pp. 4515-4526.
RZ	41.	Rahman, M.M. et al. "The structural heterogeneity of the lipooligosaccharide (LOS) expressed by pathogenic non-typeable <i>Haemophilus influenzae</i> strain NTHi 9274." <i>Glycobiology</i> 9 (1999), pp. 1371-1380.
RZ	42.	Sabirov, A. et al. "Intranasal immunization enhances clearance of nontypeable <i>Haemophilus influenzae</i> and reduces stimulation of tumor necrosis factor alpha production in the murine model of otitis media." <i>Infect. Immun.</i> 69 (2001), pp. 2964-2971.
RZ	43.	Schweda, E.K. et al. "Structural analysis of lipopolysaccharide oligosaccharide epitopes expressed by non-typeable <i>Haemophilus influenzae</i> strain 176." <i>Carbohydr. Res.</i> 337 (2002), pp. 409-420.
RZ	44.	Shen, X. et al. "Systemic and mucosal immune responses in mice after mucosal immunization with group B streptococcus type III capsular polysaccharide-cholera toxin B subunit conjugate vaccine." <i>Infect. Immun.</i> 68 (2000), pp. 5749-5755.
RZ	45.	Shurin, P.A. et al. "Bactericidal antibody and susceptibility to otitis media cause by nontypeable strains of <i>Haemophilus influenzae</i> ." <i>J. Pediatr.</i> 97 (1980), pp. 364-369.
RZ	46.	Sloyer, J.L. Jr., et al. "Immune response to acute otitis media: association between middle ear fluid antibody and the clearing of clinical infection." <i>J. Clin. Microbiol.</i> 4 (1976), pp. 306-308.
RZ	47.	Sun, J. et al. "Biological activities of antibodies elicited by lipooligosaccharide based-conjugate vaccines of nontypeable <i>Haemophilus influenzae</i> in an otitis media model." <i>Vaccine</i> 18 (2000), pp. 1264-1272.
RZ	48.	Swords, W.E. et al. "Nontypeable <i>Haemophilus influenzae</i> adhere to and invade human bronchial epithelial cells via an interaction of lipooligosaccharide with the PAF receptor." <i>Mol. Microbiol.</i> 37 (2000), pp. 13-27.
RZ	49.	Ueyama, T. et al. "Identification of common lipooligosaccharide types in isolates from patients with otitis media by monoclonal antibodies against nontypeable <i>Haemophilus influenzae</i> 9274." <i>Clin. Diagn. Lab. Immunol.</i> 6 (1999), pp. 96-100.
RZ	50.	Vogel, L. et al. "Opsono-phagocytosis of non-encapsulated <i>Haemophilus influenzae</i> ." <i>Adv. Exp. Med. Biol.</i> 371A (1995), pp. 695-698.
RZ	51.	Wagner, D.K. et al. "Analysis of immunoglobulin G antibody responses after administration of live and inactivated influenza A vaccine indicates that nasal wash immunoglobulin G is a transudate from serum." <i>J. Clin. Microbiol.</i> 25 (1987), pp. 559-562.
RZ	52.	Williams, R.C. et al. "Inhibition of bacterial adherence by secretory immunoglobulin A: a mechanism of antigen disposal." <i>Science</i> 177 (1972), pp. 697-699.
RZ	53.	Wu T.H. et al. "Outer membrane proteins as a carrier for detoxified lipooligosaccharide conjugate vaccines for nontypeable <i>Haemophilus influenzae</i> ." <i>Infect. Immun.</i> 67 (1999), pp. 5508-5513.

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